

Sentinel Peak Road Safety Review – DRAFT 11/21/2018

SAFETY REVIEW TEAM

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Sergeant Michael Dietsch, Tucson Police Department
Lieutenant David Leotaud, Tucson Police Department
Howard Dutt, Project Manager, Tucson Parks and Recreation
Ann Chanecka, Project Manager, Tucson City Manager's Office
Ellen M Paige MD, Friends of Sentinel Gateway Working Group/Panorama Estates Association

OBSERVATION PERIODS

Monday, October 29, 2018 9:00 a.m. – 12:00 p.m.
Tuesday, October 30, 2018 5:00 p.m. – 7:00 p.m.

SENTINEL PEAK GATE HOURS

Lower Gate: 7 a.m.
Upper Gate: 9 a.m. – 8 p.m. Mon-Sat; 9 a.m. – 6 p.m. Sun

SUMMARY OF ENGINEERING RECOMMENDATIONS BASED ON OBSERVATIONS

Cuesta Road Vicinity

- Remove RIGHT TURN ONLY sign along southbound Cuesta at Cedar.
- Rotate STOP sign at Sentinel Peak and Silverbell to proper angle.
- Add a speed hump between Cedar and Congress Street.
- Support neighborhood efforts to add a traffic circle and green infrastructure at/near Cedar and Cuesta Avenue.
- Consider mumble strips along Sentinel Peak Rd, along the edge stripe between speed humps.



Speed hump recommended on Cuesta between Congress and Cedar.



Neighborhood is working on a traffic circle and chicane.



Steep drop-off demonstrated here.

Two Way Park Access Road

- Confirm lanes widths and consider 10-foot wide lanes to maximize shoulder space.
- Install KEEP RIGHT sign on uphill approach to 'Y'.
- Existing speed limit sign on uphill approach to 'Y' is on the left (wrong) side of the road.
- Install additional (both sides) DO NOT ENTER and WRONG WAY signs at the downhill road segment at the 'Y'.
- Consider marking a "turnaround" lane at the 'Y' directing vehicles back to the peak/upper lot. Include appropriate signage.



Guard rail segments, better object markers, and/or delineators recommended to better guide vehicles in the narrow road.

Loop Road

- Add additional speed limit signs (at park entrance and also at beginning of Y)
- Consider warrants for guard rail.
- Add advance curve warning sign for downhill approach.
- Consider Two-Direction Large Arrow Sign (W1-7) on far-side of intersection, intended to be visible for downhill approach.
- Consider flexible delineators along/near curve edge line for downhill approach.

Upper Parking Lot

- Include lane markings and directional signs where the outbound loop road meets the upper parking lot entrance and exit lanes. Include parking lot directional signs.
- Separate the DO NOT ENTER and STOP signs at the upper parking lot exit road. Add an additional DO NOT ENTER sign on the other side of the roadway.
- Include a NO RIGHT TURN sign on the STOP sign at the upper parking lot exit road.
- Install edge line markings along the upper parking lot exit and entrance roads. Consider a 10-foot marked lane to result in a paved shoulder area for pedestrians.
- Consider diagonal parking lot stall markings to reinforce the exit direction.
- Add DO NOT ENTER signs where the upper parking lot entrance meets the parking area.
- Add directional exit signs for the upper parking lot.
- Replace ONE WAY arrow that is visible when exiting the exit driveway.

Lower Parking Lot

- If “day of the week” road closures are implemented, consider the potential impacts of overflow parking at the lower lot. Consider reconfiguring the lower lot so that traffic can loop through the lot.
- Replace worn and painted object markers on both gates.
- Install new reflective markings on the inside of the top gate (to warn bicyclists when gate is closed).

All Areas

- Consider pedestrian and bicycle warning signs at various locations along the park roads. These can be creative.
- Consider curve warning signs at appropriate locations.



Example of creative warning sign.

Maintenance Items

- Trim vegetation throughout park as needed to improve sight distance, with special consideration to trimming at/near curves. Trimming will also help ensure people biking and walking are not forced into the travel lane.
- Restripe existing pavement markings.
- Replace all object markers (PVC and otherwise).
- Sweep sand/debris in the shoulder.
- Maintain the speed humps. [Streets Division is already aware of this and it should be complete soon.]
- Replace all damaged and worn signs.
- Adjust orientation of existing speed limit sign for drivers approaching the loop road.
- Evaluate pavement for needed maintenance (which would complement small changes to lane widths).



Object markers to be replaced.

For Discussion:

- Consider adding narrow median islands (withOUT speed pillows) on section between park entrance and loop road.
- Consider shared lane markings where appropriate.

TUCSON POLICE DEPARTMENT REPORTED INCIDENCES ON SENTINEL PEAK

Tucson Police Department has provided a summary of both traffic collisions reported and other types of incidences reported from 2011 – 2018 (as of October 19). TPD’s summary of the traffic collisions is attached as Exhibit A. The data shows there is an average of 2 reported collisions per year.

In addition to reported traffic collisions, TPD pulled data on all reported incidents from a six month period (dates of incidents range from 4/29/2018 – 10/27/2018). There were a total of 173 reported incidents for an average of 29 per month. The nature of these reports includes things like alarms, shootings, burglaries, vehicle break-ins, collisions, and more.

ENFORCEMENT

Neighbors regularly report illegal and/or dangerous behavior on Sentinel Peak. The incident data over the six month period suggests that there is a reported incident almost daily. Also, during the evening Tuesday observation period, members of the Safety Team observed concerning behavior.

The Safety Team agrees that Sentinel Peak would benefit from an increased presence of officers. The new Community Service Officer/Park Ranger program could have a big impact on the safety of this road/park.

CHANGES TO GATE HOURS/DAYS

The team recognized safety challenges with having cars, bikes, and pedestrians sharing the space on the narrow Sentinel Peak Road. The recommended treatments can help but will not solve all safety concerns. The most effective way to eliminate the conflicts with sharing the limited space is to separate the uses. However, construction of a multi-use path/bike lane/sidewalk is not feasible due to cost and environmental disruption.

One option to improve safety would be to change vehicle access to the park on specific full days or hours of a day. The team supports further community conversations on this topic.

TRAFFIC VOLUME SUMMARY

Traffic volume and speed data for Sentinel Peak and Cuesta Roads were collected November 7 – 13, 2018. It is important to note that Monday, November 12 was Veterans Day. More detailed information showing the count data is attached as exhibit B.

Traffic Data Collection Location 1: 1000-feet up from second gate (In the Park Data)

Data Summary:

- 2,283 vehicles entered Sentinel Park over a week period
- Saturday and Sunday are the busiest days
- Tuesday and Wednesday were the least busy days
- Average of 256 cars per day during the week (Tuesday – Friday)
- Average of 441 cars per day during a weekend day
- Evening time (4-6 p.m.) is the busiest time for vehicles.

Traffic Data Collection Location 2: 400-feet south of Congress Street

Data Summary:

- 8,239 vehicles traveled on Cuesta over a week period
- Most of the traffic on Cuesta is residential rather than cut-through traffic traveling to the park. During the week roughly 24% of the traffic continued to A Mountain and on weekends roughly 32% continues.
- Evening time (4-6 p.m.) is the busiest time for vehicles during the weekday.

TRAFFIC SPEED SUMMARY

Pending

This report is subject to the provisions of 23 USC § 409. Any intentional or inadvertent release of this material, or any data derived from its use does not constitute a waiver of privilege pursuant to 23 USC § 409.

23 USC § 409 - Discovery and admission as evidence of certain reports and surveys

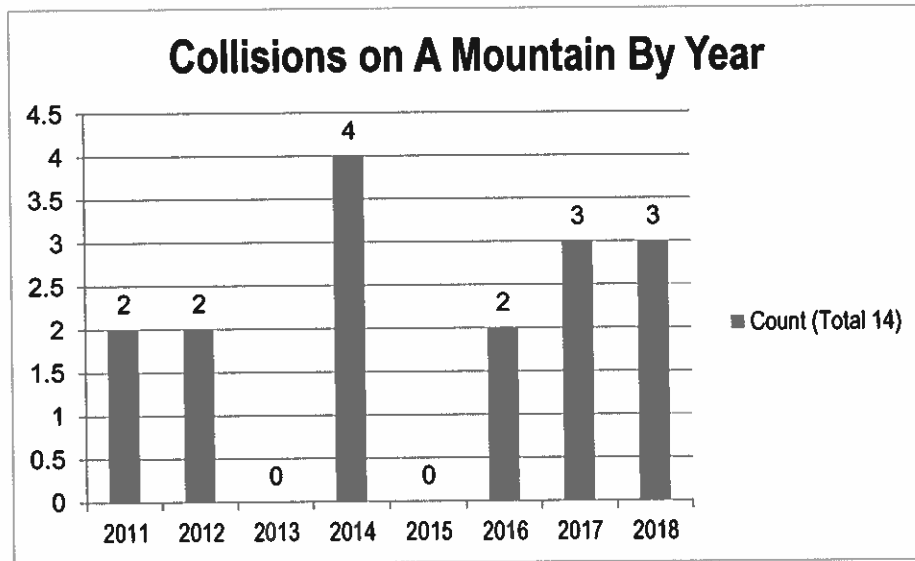
Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential accident sites, hazardous roadway conditions, or railway-highway crossings, pursuant to sections 130, 144, and 148 of this title or for the purpose of developing any highway safety construction improvement project which may be implemented utilizing Federal-aid highway funds shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.



Collisions on A Mountain

January 1, 2011 to October 19, 2018

This report provides a breakdown of collisions¹ that occurred in the area of A Mountain and S Sentinel Peak Rd. The data has been broken down into the total number of collisions by year as well as a list of the collisions.



Accident/ Incident Number	Street	Fatal ?	UCR	Status Description
1102230243	1000 BLK OF S SENTINEL PEAK RD	No	3202	Traffic Accident/ Property Damage/ Other Motor Vehicle
1106210725	S SENTINEL PEAK RD / W KANDY CT	No	2102	DUI/ Personal Injury Accident
1405220427	1000 BLK OF S SENTINEL PEAK RD	No	3107	Traffic Accident/ Other
1405240374	S SENTINEL PEAK RD / S STEPHANIE LP	No	3217	Traffic Accident/Property Damage/ Hit and Run/ Other
1407010651	S PANORAMA CI / S SENTINEL PEAK RD	No	3206	Traffic Accident/Property Damage/ Fixed Object
1409078522	1000 BLK OF S SENTINEL PEAK RD	No	3202	Traffic Accident/Property Damage/ Hit and Run/ Other Motor Vehicle
1606070357	400 BLK OF S SENTINEL PEAK RD	No	3212	Traffic Accident/Property Damage/ Hit and Run/ Motor Vehicle
1610020385	1000 BLK OF S SENTINEL PEAK RD	No	2103	DUI/ Property Damage Only Accident
1703240528	1000 BLK OF S SENTINEL PEAK RD	No	3212	Traffic Accident/Property Damage/ Hit and Run/ Motor Vehicle

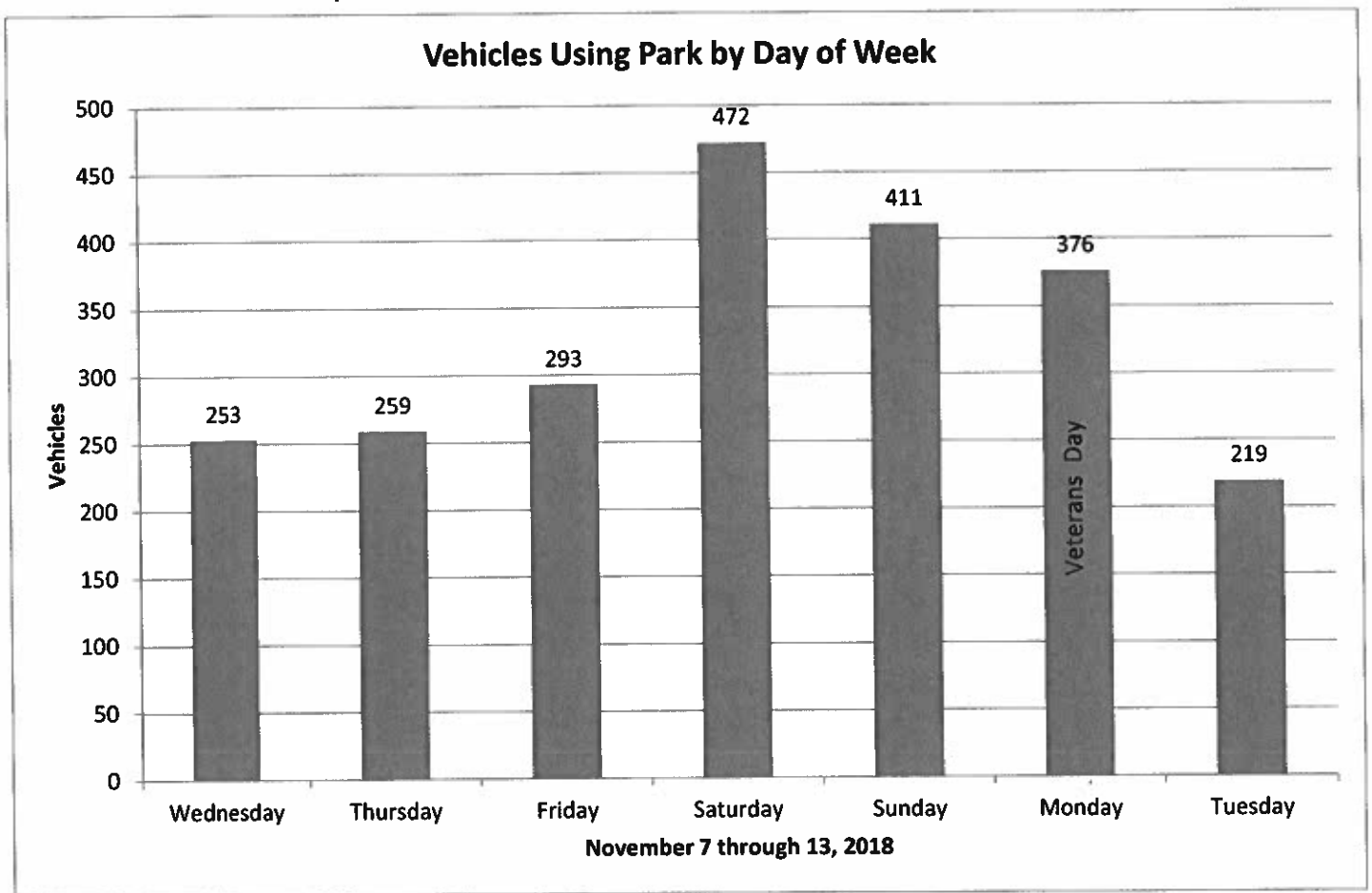
¹ Collisions include 2101, 2102, 2103, 3001, 3011, 3002, 3012, 3003, 3013, 3004, 3014, 3005, 3015, 3006, 3016, 3007, 3017, 3101, 3111, 3102, 3112, 3103, 3113, 3104, 3114, 3105, 3115, 3106, 3116, 3107, 3117, 3201, 3211, 3202, 3212, 3203, 3213, 3204, 3214, 3205, 3215, 3206, 3216, 3207, 3217, 3301, 3311, 3302, 3312, 3303, 3313, 3401, 3402, 3403, 3404.



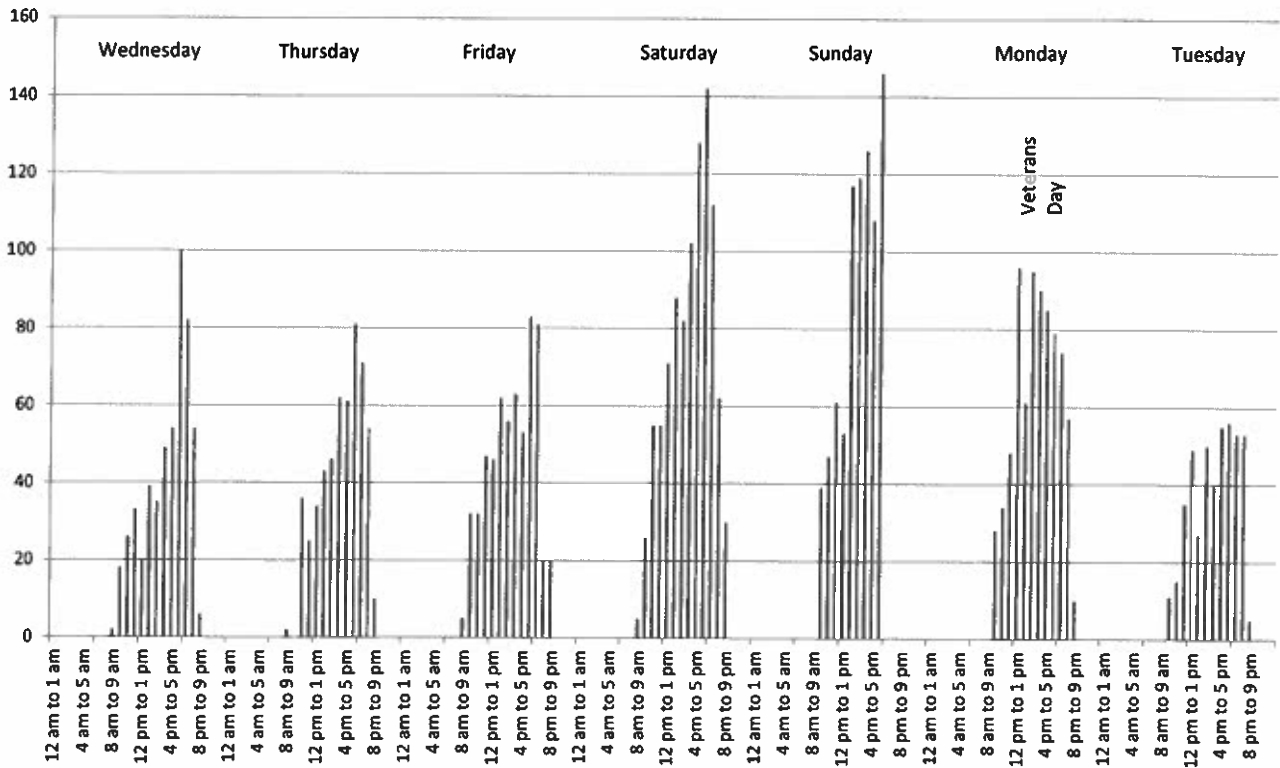
Accident/ Incident Number	Street	Fatal ?	UCR	Status Description
1705140403	1000 BLK OF S SENTINEL PEAK RD	No	3217	Traffic Accident/Property Damage/ Hit and Run/ Other
1705180690	W CEDAR ST & S CUESTA AV	No	3206	Traffic Accident/Property Damage/ Fixed Object
1802090405	S PANORAMA CI / S SENTINEL PEAK RD	No	3102	Traffic Accident/Property Damage/ Hit and Run/ Motor Vehicle
1803260472	S BELLA VISTA DR / S SENTINEL PEAK RD	No	3212	Traffic Accident/Property Damage/ Hit and Run/ Motor Vehicle
1810110191	S SENTINEL PEAK RD	Yes	3001	Traffic Accident/ Fatal/ Pedestrian

Source: *vectorside.GISDATA.TPD_INCIDENTS* query date 10/19/2018

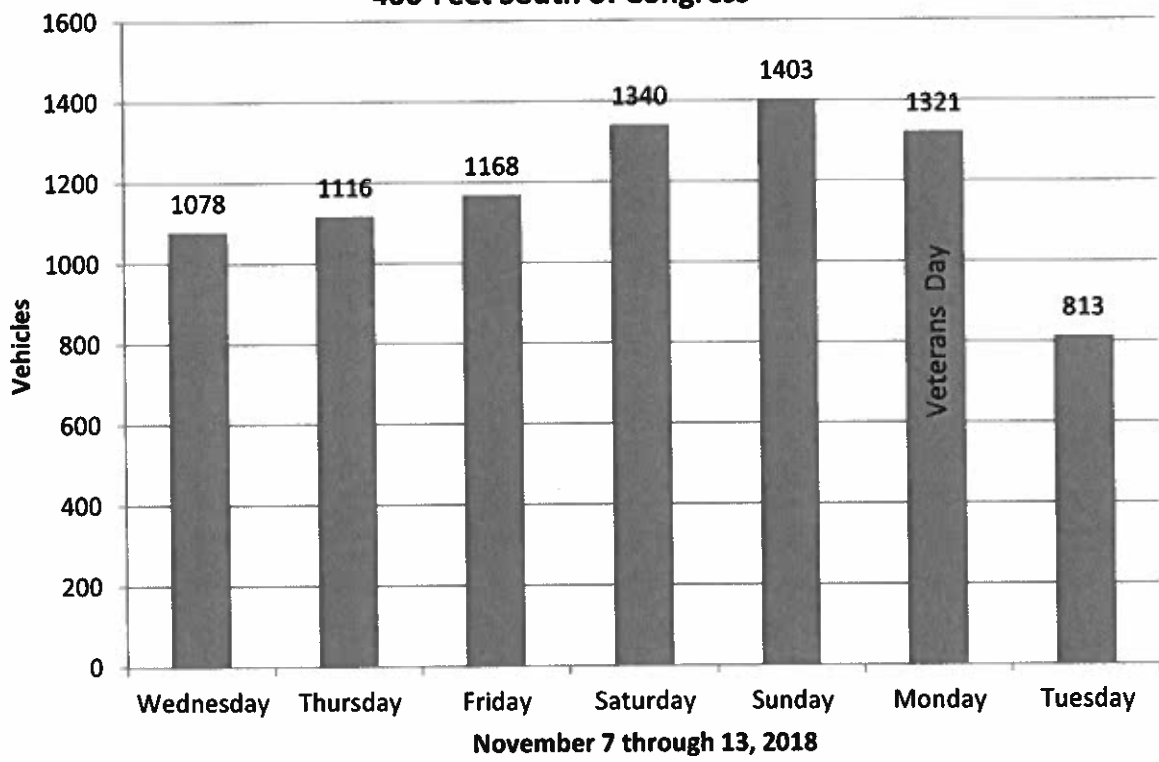
Exhibit B: Traffic Volume and Speed data for Sentinel Peak and Cuesta Roads. Data collected November 7 – 13, 2018.



**Total Volume by Time of Day Along Sentinel Peak
1000-Foot from Second Gate within Park**



Total Volume S Cuesta Ave 400-Foot South of Congress



**Total Volume by Time of Day S Cuesta Ave
400-Foot South of Congress**

